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Education

1998	B.S. Marine Science Biology	University of Miami, Coral Gables, FL
2003	M.S. Marine Biology & Fisheries	RSMAS, U. Miami, Virginia Key, FL
2010	Ph.D. Marine Biology & Fisheries	RSMAS, U. Miami, Virginia Key, FL

Professional Experience

2011-	NOAA/OAR/AOML	Oceanographer
2010-2011	University of Miami	Assistant Scientist
2008-2010	University of Miami	Senior Research Associate II
2005-2008	University of Miami	Senior Research Associate
2003-2005	University of Miami	Research Associate III
2000-2003	University of Miami	Research Assistant
1999-2000	University of Miami	Research Associate I
1998-1999	University of Miami	Casual Worker
1997	University of Miami	Honors Summer Intern

Scientific Committees/Organizations

2011-	NOAA Integrated Ecosystem Assessment Steering Committee, Chair (2012-present)
2010-	Gulf of Mexico Integrated Ecosystem Assessment Steering Committee
2014-	South Florida/Biscayne Bay Habitat Blueprint Focus Area, Co-Lead
2013-2014	Habitat Blueprint Focus Area Selection Team, Southeast & Caribbean
2012-	US Interagency Blue Carbon Working Group
2009-2011	NOAA Environmental Modeling Strategic Planning Science Team
2007-2010	Ecological Indicator Working Group, a committee formed by the Science Coordination Group of the South Florida Ecosystem Restoration Task Force
2007-	Science Coordination Group of the South Florida Ecosystem Restoration Task Force
2007-	CERP Southern Coastal System Assessment, Evaluation and Project Team
2006-2008	CERP/ Florida Bay/Florida Keys Feasibility Study Project Development Team
2007-2009	NOAA Autonomous Underwater Vehicle Working Group
2007-2009	NOAA's Ecosystem Research Program management committee

2007-	American Geophysical Union member
2006-	Union of Concerned Scientists member
2009-	ASLO member

Refereed Journal Publications

- Kearney, K.A., M. Butler, R. Glazer, C. Kelble, J.E. Serafy, E. Stabenau. 2015. Quantifying Florida Bay habitat suitability for fishes and invertebrates under climate change scenarios. *Environmental Management*. In Press
- Karnauskas, M., MJ Schirripa, JK Craig, GS Cook, CR Kelble, JJ Agar, BA Black, DB Enfield, D Lindo-Atichati, BA Muhling, KM Purcell, PM Richards, C Wang. 2015. Evidence of climate-driven ecosystem reorganization in the Gulf of Mexico. *Global Change Biology*. doi: 10.1111/gcb.12894
- Fletcher, P.J., Kelble, C.R., Nuttle, W.K., Kiker, G.A., 2014. Using the integrated ecosystem assessment framework to build consensus and transfer information to managers. *Ecological Indicators*. 44: 11–25. doi:10.1016/j.ecolind.2014.03.024
- Loomis, D.K., Ortner, P.B., Kelble, C.R., Paterson, S.K., 2014. Developing integrated ecosystem indices. *Ecological Indicators*. 44: 57–62. doi:10.1016/j.ecolind.2014.02.032
- Smith, R.H., Johns, E.M., Goni, G.J., Trinanes, J., Lumpkin, R., Wood, A.M., Kelble, C.R., Cummings, S.R., Lamkin, J.T., Privoznik, S., 2014. Oceanographic conditions in the Gulf of Mexico in July 2010, during the Deepwater Horizon oil spill. *Cont. Shelf Res.* 77, 118–131. doi:10.1016/j.csr.2013.12.009
- Conmy, R.N., Coble, P.G., Farr, J., Wood, a M., Lee, K., Pegau, W.S., Walsh, I.D., Koch, C.R., Abercrombie, M.I., Miles, M.S., Lewis, M.R., Ryan, S. a, Robinson, B.J., King, T.L., Kelble, C.R., Lacoste, J., 2014. Submersible optical sensors exposed to chemically dispersed crude oil: wave tank simulations for improved oil spill monitoring. *Environ. Sci. Technol.* 48: 1803–10. doi:10.1021/es404206y
- Cook, G.S., Fletcher, P.J., Kelble, C.R., 2014. Towards marine ecosystem based management in South Florida: Investigating the connections among ecosystem pressures, states, and services in a complex coastal system. *Ecological Indicators*. 44: 26–39. doi:10.1016/j.ecolind.2013.10.026
- Levin, P., Kelble, C., Shuford, R., Ainsworth, C., de Reynier, Y., Dunsmore, R., Fogarty, M.J., Holsman, K., Howell, E., Monaco, M., Oakes, S., Werner, F., 2014. Guidance for implementing integrated ecosystem assessments : a US perspective. *ICES Journal of Marine Science*. 71: 1198–1204.
- Kelble, C. R., D. K. Loomis, S. Lovelace, W. K. Nuttle, P. B. Ortner, P. Fletcher, G. S. Cook, J. J. Lorenz, and J. N. Boyer. 2013. The EBM-DPSER Conceptual Model: Integrating Ecosystem Services into the DPSIR Framework. *Plos One* 8(8), e70766.
- Cannizzaro, J. P., C. Hu, K. L. Carder, C. R. Kelble, N. Melo, E. M. Johns, G. A. Vargo, and C. A. Heil. 2013. On the Accuracy of SeaWiFS Ocean Color Data Products on the West Florida Shelf, *Journal of Coastal Research* 29(6):1257-1272.
- Kelble, C. R. 2013. Low Salinity Predation Refugia Could Cause HAB Initiation. *Journal of Phycology* 49:18-19.
- Kelble, C. R., P. B. Ortner, G. L. Hitchcock, M. J. Dagg, and J. N. Boyer. 2010. Temporal and spatial variability of mesozooplankton in a shallow sub-tropical bay: Influence of top-down control. *Estuaries and Coasts* 33:723-737.

- Zhang, J. Z., C. R. Kelble, C. J. Fischer, and L. Moore. 2009. Hurricane Katrina induced nutrient runoff from an agricultural area to coastal waters in Biscayne Bay, Florida. *Estuarine Coastal and Shelf Science* 84(2):209-218.
- Boyer, J. N., C. R. Kelble, P. B. Ortner, and D. T. Rudnick. 2009. Phytoplankton bloom status: Chlorophyll a biomass as an indicator of water quality condition in the southern estuaries of Florida, USA. *Ecological Indicators* 9:S56-S67.
- Serafy, J.E., C.R. Keble, T.R. Capo, S.A. Luthy and P.B. Ortner. 2008. Vertical movement rates of captive larval billfishes (Istiophoridae) collected from the Straits of Florida. *Florida Scientist* 71:23-30.
- Hitchcock, G.L., W.S. Arnold, M. Frischer, C.R. Kelble, and R.K. Cowen. 2008. Short-term dispersal of an intentionally-released patch of larval Mercenaria Spp. In the Indian River Lagoon, Florida, USA. *Bulletin of Marine Science* 82: 41-57.
- Lee, T. N., N. Melo, E. Johns, C. Kelble, R. Smith, and P. Ortner. 2008. On water renewal and salinity variability in the northeast subregion of Florida Bay. *Bulletin of Marine Science* 82: 83-105.
- Kelble, C. R., E. M. Johns, W. K. Nuttle, T. N. Lee, R. H. Smith, and P. B. Ortner. 2007. Salinity patterns of Florida Bay. *Estuarine Coastal and Shelf Science* 71: 318-334.
- Serafy, J. E., T. R. Capo, and C. R. Kelble. 2006. Live capture of larval billfishes: Design and field testing of the continuous access neuston observation net (CANON). *Bulletin of Marine Science* 79: 853-857.
- Kelble, C. R., P. B. Ortner, G. L. Hitchcock, and J. N. Boyer. 2005. Attenuation of photosynthetically available radiation (PAR) in Florida Bay: Potential for light limitation of primary producers. *Estuaries* 28: 560-571.
- Hitchcock, G. L., T. N. Lee, P. B. Ortner, S. Cummings, C. Kelble, and E. Williams. 2005. Property fields in a Tortugas Eddy in the southern straits of Florida. *Deep-Sea Research Part I-Oceanographic Research Papers* 52: 2195-2213.
- Hu, C. M. F. E. Muller-Karger, C. Taylor, K. L. Carder, C. Kelble, E. Johns, and C. A. Heil. 2005. Red tide detection and tracing using MODIS fluorescence data: A regional example in SW Florida coastal waters. *Remote Sensing of Environment* 97: 311-321.
- Lawrence, D., M. J. Dagg, H. B. Liu, S. R. Cummings, P. B. Ortner, and C. Kelble. 2004. Wind events and benthic-pelagic coupling in a shallow subtropical bay in Florida. *Marine Ecology-Progress Series* 266: 1-13.
- Zhang, J. Z., C. R. Kelble, and F. J. Millero. 2001. Gas-segmented continuous flow analysis of iron in water with a long liquid waveguide capillary flow cell. *Analytica Chemica Acta* 438: 49-57.

Technical Reports

- Karnauskas, M., Schirripa, M.J., Kelble, C.R., Cook, G.S., Craig, J.K., 2013. Ecosystem Status Report for the Gulf of Mexico. Miami, FL USA.
- Kelble, C. R., J. Browder, and A. Powell. 2010. 2010 Juvenile Sportfish Monitoring in Florida Bay, Everglades National Park Annual Report. United States Army Corps of Engineers.
- Kelble, C. R., and J. N. Boyer. 2009. Southern Coastal System Hypothesis Cluster - Water Quality, p. 20. *In C.E.R.P. Assessment Team [ed.], 2009 System Status Report.*
- Kelble, C. R., J. Browder, and A. Powell. 2009. 2009 Juvenile Spotted Seatrout Monitoring in Florida Bay, Everglades National Park Annual Report. United States Army Corps of Engineers.

Kelble, C. R., and J. N. Boyer. 2007. Southern Estuaries Hypothesis Cluster - Water Quality, p. 22. In C.E.R.P. Assessment Team [ed.], 2007 System Status Report.

Conference Presentations

- Kelbler, C.R. and J. Browder. 2011. Setting Juvenile Sportfish Performance Measures for Everglades Restoration. 2011 ASLO meeting. February 16-20, 2011, San Juan, Puerto Rico
- Kelble, C. R. and J. Browder. 2010. Juvenile Sportfish Populations in Florida Bay: Influence of Salinity. Page 168 in Greater Everglades Ecosystem Restoration. University of Florida, IFAS, Naples, FL USA.
- Nuttle, W., J. Ault, J. Fourqurean, G. Johns, C. Kelble, D. Lee, V. Leeworthy, D. Lirman, and J. Lorenz. 2010. Integrating Human Dimensions into Ecosystem Management of the Florida Keys and Dry Tortugas: Preliminary Findings from the MARES Project. Page 222 in Greater Everglades Ecosystem Restoration. University of Florida, IFAS, Naples, FL USA.
- Kelble, C.R., P.B. Ortner, G.L. Hitchcock. 2010. Salinity and the correlation between mesozooplankton and bay anchovy, *Anchoa mitchilli*. 2010 Ocean Sciences Meeting, Portland, OR USA, Feb. 22-26, 2010.
- Kelble, C.R., P.B. Ortner, G.L. Hitchcock, D.L. DeAngelis. 2009. Salinity, mesozooplankton and *Anchoa mitchilli* in Florida Bay. Conference of the Coast & Estuarine Research Foundation. Portland, OR, Nov. 2-5, 2009.
- Kelble, C.R., P.B. Ortner, G.L. Hitchcock, M.J. Dagg. 2008. Relationship of mesozooplankton to water quality in Florida Bay. 2008 Florida Bay and Adjacent Marine Systems Science Conference, Naples, FL, December 8-11, 2008, 112-113.
- Kelble, C.R., C.E. Porch, A.B. Powell, M. Lacroix, M. Greene, J. Browder. 2008. Juvenile spotted seatrout power analysis and monitoring for Florida Bay. 2008 Florida Bay and Adjacent Marine Systems Science Conference, Naples, FL, December 8-11, 2008, 109-110.
- Ortner, P.B., C.L. Mitchell, J.N. Boyer, C.R. Kelble. 2008. Marine and estuarine goal setting for south Florida (MARES). 2008 Florida Bay and Adjacent Marine Systems Science Conference, Naples, FL, December 8-11, 2008, 111
- Johns, E.M., T.N. Lee, C.R. Kelble, R.H. Smith, N. Melo, P.B. Ortner, V.H. Kourafalou. 2008 Surface salinity variability of south Florida coastal and estuarine waters from gridded shipboard observations, 1995-2008. 2008 Florida Bay and Adjacent Marine Systems Science Conference, Naples, FL, December 8-11, 2008, 104
- Hu, C., J. Cannizzaro, F. Muller-Karger, J. Hendee, E. Johns, L. Gramer, C. Kelble, N. Melo. 2008. Remote Sensing Of Water Quality Index in Florida Bay and Florida Keys: Current Status and Challenge. 2008 Florida Bay and Adjacent Marine Systems Science Conference, Naples, FL, December 8-11, 2008, 98-100
- Kelble, C.R., J.N. Boyer, D. Rudnick, P.B. Ortner. 2008 Water Quality monitoring in the southern estuaries. 2008 Greater Everglades Ecosystem Resoration Conference, Naples, FL USA, July 28-August 1, 2008, 213.
- Lee, T.N., Melo, M., E.M. Johns, R.H. Smith, C.R. Kelble, P.B. Ortner. 2008. Understanding Florida Bay hypersalinity and water exchange. 2008 Greater Everglades Ecosystem Resoration Conference, Naples, FL USA, July 28-August 1, 2008, 298.

- Melo, M., T.N. Lee, E.M. Johns, R.H. Smith, C.R. Kelble, P.B. Ortner. 2008. Understanding Florida Bay hypersalinity and water exchange. 2008 Ocean Sciences Meeting, Orlando, FL USA, March 2-7, 2008.
- Kelble, C.R., P.B. Ortner, G.L. Hitchcock, M.J. Dagg, Johns, E.M.. 2008. Salinity and mesozooplankton communities in Florida Bay. 2008 Ocean Sciences Meeting, Orlando, FL USA, March 2-7, 2008.
- Johns, E.M., C.R. Kelble, T.N. Lee, N. Melo, R.H. Smith, P.B. Ortner. 2008. Salinity variability of south Florida coastal waters on time scales from episodic to multidecadal: How might Everglades restoration change these patterns? 2008 Ocean Sciences Meeting, Orlando, FL USA, March 2-7, 2008.
- Smith, R. H., P. B. Ortner, V. H. Kourafalou, T. N. Lee, E. M. Johns, S. Cummings, C. R. Kelble, and C. Hu. 2006. Post-Katrina Pollutant and Contaminant Pathways: Downstream Transport or Local Retention? EOS, Transactions, American Geophysical Union **87**: supplemental.
- Zhang, J. Z., C. J. Fischer, and C. R. Kelble. 2006. Katrina induced nutrient runoff from agricultural areas to coastal waters. EOS, Transactions, American Geophysical Union **87**: supplemental.
- Johns, E. M., T. N. Lee, P. B. Ortner, V. H. Kourafalou, R. H. Smith, and C. R. Kelble. 2006. The Evolution and Future of the South Florida Regional Observing System (SF- ROS). EOS, Transactions, American Geophysical Union **87**: supplemental.
- Kelble, C.R., E.M. Johns, P.B. Ortner, W.K. Nuttle, T.N. Lee, C.D. Hittle, and R.H. Smith. 2005. Salinity patterns of Florida Bay. Proceedings, 2005 Florida Bay and Adjacent Marine Systems Science Conference, Duck Key, FL, December 11-14, 2005. University of Florida, 137-138
- Smith, R.H., E. Johns, P.B. Ortner, T.N. Lee, C.R. Kelble, and N. Melo. 2005. Satellite-tracked surface drifter trajectories reveal the spatial and temporal current variability of south Florida. Proceedings, 2005 Florida Bay and Adjacent Marine Systems Science Conference, Duck Key, FL, December 11-14, 2005. University of Florida, 148-149
- Smith, R.H., E.M. Johns, S.R. Cummings, P.B. Ortner, C.R. Kelble, N. Melo, and T.N. Lee. 2005. The influence of the 2005 hurricane season on water quality in Florida Bay and surrounding coastal waters. Proceedings, 2005 Florida Bay and Adjacent Marine Systems Science Conference, Duck Key, FL, December 11-14, 2005. University of Florida, 146-147
- Kelble, C.R., G.L. Hitchcock, P.B. Ortner, and J.N. Boyer. A recent study of the light environment in Florida Bay. 2003. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem from Kissimmee to the Keys, Palm Harbor, FL, April 13-18, 2003. University of Florida Office of Conferences and Institutes, 48-50 (CD-ROM)
- Johns, E., P.B. Ortner, R.H. Smith, C.R. Kelble, S.R. Cummings, J.C. Hendee, N. Melo, T.N. Lee, and E.J. Williams. 2003. New interdisciplinary oceanographic observations in the coastal waters adjacent to Florida Bay. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystem from Kissimmee to the Keys, Palm Harbor, FL, April 13-18, 2003. University of Florida Office of Conferences and Institutes, 45-47 (CD-ROM)

Invited Workshop Presentations:

- Kelble, C.R., P. Ortner, D. Rudnick, J. Boyer, H. Briceno, M. Butler, P. Hall, C. Madded, M. Marshall. 2010. Florida Bay Nutrient Knowledge: A System on the Edge. Estuary and Coastal Numeric Nutrient Criteria Development Meeting. Miami, FL USA. March 2-3, 2010

Kelble, C. R., E.M. Johns, J.Z. Zhang, N. Melo, T. Lee and P. Ortner. 2008. Climatology, Connectivity, Residence Times, and Water Quality in Florida Bay. Florida Keys National Marine Sanctuary Algal Bloom Workshop. Homestead, FL USA. April 14, 2008.

Kelble, C. R. and P.B. Ortner. The Algal Bloom in the Sounds of South Biscayne Bay. Florida Keys National Marine Sanctuary Advisory Committee. Marathon, FL USA. February 23, 2007

Kelble, C. R. and P.B. Ortner. The Algal Bloom in the Sounds of South Biscayne Bay. Biscayne Bay Regional Restoration Coordination Team. Miami, FL USA. February 13, 2007

Journal Reviewer:

Bulletin of Marine Science, Continental Shelf Research, Environmental Monitoring and Assessment, Estuarine Coastal and Shelf Science, Estuaries and Coasts, Journal of Environmental Management, Limnology, PLoS One, Fisheries Oceanography

Current Support

Pending Support

Prior Support

1. PROJECT TITLE: South Florida Regional Observing System (SF-ROS)
Funding Source: NOAA/NOS/IOOS
2 months of salary support Budget Period: June 2006- June 2008
 3. PROJECT TITLE: Water Quality, Circulation and Salinity Monitoring in the Southern Estuaries CERP Domain
Funding Source: USACE/CERP
2 months of salary support Budget Period: October 2008 – September 2010
 4. PROJECT TITLE: Marine and Estuarine Goal Setting for South Florida (MARES)
Funding Source: NOAA/CSCOR

\$238,112	Budget Period: June 2009 - May 2012
5. PROJECT TITLE: South Florida Ecosystem Observation Program	
Funding Source: NOAA	
\$325,000	Budget Period: April 2011 – February 2012
6. PROJECT TITLE: Biscayne Bay Baseline Turbidity Project	
Funding Source: USACoE	
\$350,000	Budget Period: June 2010 – August 2011

High School Students Supervised:

Hallee Meltzer Center for Advanced Studies High School